

Claims

1 - 18. (Cancelled)

19. (Currently amended) Apparatus for remotely monitoring and controlling water parameters in a water installation, comprising:

~~network connectivity of a water installation including equipment having no native language protocol for providing water parameters of the installation, the network including:~~

a plurality of sensors for monitoring a plurality of water installation parameters;

an electronic data acquisition and control device in electrical communication with said sensors for receiving data signals indicative of the monitored water installation parameters, said electronic data acquisition and control device configured to detect an error condition in at least one water installation parameter range and generate an error alert when said parameter is outside said range, said electronic data acquisition and control device further configured to and for selectively generating control signals to one or more water installation control devices to affect a change in related to said water installation parameters;

a remote server; and

a network interface for providing a web-based network connection between said remote server and said data acquisition and control device said interface including means for periodically transmitting data to said remote server at a selectable interval for collection and storage on said server, and for transmitting commands to said data acquisition and control device for controlling said water installation parameters related to one or more water installation control devices.

20. (Original) The apparatus of Claim 19, further comprising means for remotely viewing a current operational state of the water installation.

21. (Previously presented) The apparatus of Claim 19, further comprising means for remotely viewing the data stored on the remote server in the form of a graph, chart, or table.

22 -29. (Cancelled)

30. (Currently amended) A method for remotely monitoring and controlling water parameters of a pool or a spa, said method comprising:

~~providing water installation equipment having no native language protocol for providing water parameters of the installation;~~

periodically collecting water parameter data from the pool or spa equipment;

providing a data communication link between the equipment and a remote server on a predetermined schedule or upon demand;

transmitting the water parameter data over said data communication link from said equipment to the remote server for storage and processing at the remote server;

accessing the remote server to access the water parameter data; and

transmitting control commands from the remote server to the pool or spa equipment to affect a change in said parameters;

wherein the steps of transmitting and accessing are facilitated by the Internet.

31. (Original) The method of Claim 30, further including accessing the remote server by use of an Internet browser.

32. (Original) The method of Claim 30, further comprising remotely accessing the remote server to view a current operational state of the water installation.

33. (Original) The method of Claim 30, further comprising remotely viewing the data stored on the remote server in the form of a graph, chart, or table.

34.-38. (Cancelled)

39. (Currently amended) A method of controlling pool water parameters over the Internet, including:

~~providing a pool with equipment having no native language protocol for providing water parameters of the pool;~~

providing means to monitor said water parameters at said pool, and detect an error condition in at least one water parameter range;

transmitting said parameters to a server connected to the Internet at a selectable interval;

storing said parameters on said server;

viewing said parameter information stored on said server;

transmitting a command to said server in response to said viewing;

transmitting said command from said server to ~~controlled~~ equipment at said pool to cause said equipment to take a desired action affecting said water parameter; and

generating from said providing means an error alert when said water parameter is outside said range.

40. (Currently amended) A method for remotely monitoring and controlling water parameters in a water installation, comprising:

~~providing a water installation with equipment having no native language protocol for providing water parameters of the installation;~~

providing a sensor for monitoring a water installation parameter;

providing an electronic data acquisition and control device in communication with said sensor for receiving data signals indicative of the monitored water parameter, said electronic data

acquisition and control device configured to detect an error condition in at least one water parameter range and generate an error alert when said parameter is outside said range, said electronic data acquisition and control device further configured to ~~and for~~ selectively generating control signals to control a device related to said parameter;

providing a remote server;

providing a remote control device; and

providing a network interface for providing a connection between said remote server and said data acquisition and control device via a web-based network;

wherein implementation of the method comprises the steps:

i) transmitting data related to said water parameter from said network interface to said remote server for collection and storage;

ii) viewing said data related to said water parameters by said remote control device;

iii) transmitting a command from said remote control device to said remote server in response to said viewing;

iv) transmitting said command from said remote server to said data acquisition and control device for controlling said device to affect a change in ~~related to~~ said parameter.

41. (Previously presented) The method of Claim 40, wherein a web browser is used for said viewing of said data related to said water parameter.

42. (Previously presented) The method of Claim 41, further including updating said data related to said water parameter in real-time using a Java applet.

43. (Previously presented) The method of Claim 40 including providing a spa as said water installation.

44. (Previously presented) The method of Claim 41 including providing a pool as said water installation.

45. (Currently amended) Apparatus for remotely monitoring and controlling water parameters in a water installation, comprising:

~~providing a water installation with equipment having no native language protocol for providing water parameters of the installation;~~

at least one sensor for monitoring a water installation parameter;

a server for receiving and storing data from said sensor, said server being accessible from said sensor only via an Internet connection;

a control device remote from said sensor;

an electronic data acquisition and control device in communication with said sensor for receiving data signals indicative of the monitored water installation parameter, said electronic data acquisition and control device configured to detect an error condition in at least one water installation parameter range and generate an error alert when said parameter is outside said range, said electronic data acquisition and control device further configured to ~~and for~~ selectively generating control signals to control the device related to said parameter, said electronic data acquisition and control device facilitating the transmission of data from said sensor to said server; and

an Internet connection between said server and said data acquisition and control device.

46. (Previously presented) The apparatus of Claim 45, including an Internet-browser applet graphical user interface for accessing said server.

47. (Cancelled)